



IFW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Bianca A. Thomae et al. Art Unit : 1653
Serial No. : 10/824,828 Examiner : Unknown
Filed : April 15, 2004
Title : ARSENIC METHYLTRANSFERASE SEQUENCE VARIANTS

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL

The following correspondence relating to this application is enclosed for filing:

1. Information Disclosure Statement (1 page);
2. Form PTO-1449 (3 pages);
3. Copies of Cited References (38 references); and
4. A Return Postcard.

Please date stamp and return the enclosed postcard. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: June 2, 2005

Elizabeth N. Kaytor
Elizabeth N. Kaytor, Ph.D.
Reg. No. 53,103

Fish & Richardson P.C., P.A.
60 South Sixth Street
Suite 3300
Minneapolis, MN 55402
(612) 335-5070 telephone
(612) 288-9696 facsimile

60297131.doc

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

June 3, 2005
Date of Deposit
Signature Lisa M. Becker
Typed or Printed Name of Person Signing Certificate



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Bianca A. Thomae et al. Art Unit : 1653
Serial No. : 10/824,828 Examiner : Unknown
Filed : April 15, 2004
Title : ARSENIC METHYLTRANSFERASE SEQUENCE VARIANTS

MAIL STOP AMENDMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Applicants request consideration of the references listed on the attached PTO-1449 form. Under 37 C.F.R. § 1.98 (a)(2)(ii), only copies of foreign patent documents and/or non-patent literature are enclosed. Copies of any listed U.S. patents or U.S. patent application publications can be provided upon request.

This statement is being filed before the receipt of a first Office Action on the merits. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: June 2, 2005

Elizabeth N. Kaytor
Elizabeth N. Kaytor/Ph.D.
Reg. No. 53,103

Fish & Richardson P.C., P.A.
60 South Sixth Street
Suite 3300
Minneapolis, MN 55402
Telephone: (612) 335-5070
Facsimile: (612) 288-9696

60296934.doc

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date of Deposit June 3, 2005
Signature [Signature]
Typed or Printed Name of Person Signing Certificate Lisa M. Becker

Substitute Form PTO-1449

U.S. Department of Commerce
Patent and Trademark Office

Attorney's Docket No.

07039-454001

Application No.

10/824,828

**Information Disclosure Statement
by Applicant**

(Use several sheets if necessary)

(37 CFR §1.96(b))

Applicant

Bianca A. Thomae et al.

Filing Date

April 15, 2004

Group Art Unit

1653

U.S. Patent Documents

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	5,451,683	09/19/95	Barrett et al.			
	AB	5,733,729	03/31/98	Lipshutz et al.			
	AC	5,770,722	06/23/98	Lockhart et al.			

Foreign Patent Documents or Published Foreign Patent Applications

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AD	WO 98/20019	05/14/98	PCT				
	AE	WO 99/57318	11/11/99	PCT				

Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	AF	Bradford, "A Rapid and Sensitive Method for the Quantitation of Microgram Quantities of Protein Utilizing the Principle of Protein-Dye Binding," <u>Anal. Biochem.</u> , 1976, 72:248-254
	AG	Caine et al., "Recombinant Human Phenylethanolamine N-Methyltransferase: Overproduction in <i>Escherichia coli</i> , Purification, and Characterization," <u>Protein Expr. Purif.</u> , 1996, 8(2):160-166
	AH	Chadwick et al., "Heterozygote and Mutation Detection by Direct Automated Fluorescent DNA Sequencing Using a Mutant <i>Taq</i> DNA Polymerase," <u>BioTechniques</u> , 1996, 20:676-683
	AI	Cibelli et al., "Cloned Transgenic Calves Produced from Nonquiescent Fetal Fibroblasts," <u>Science</u> , 1998, 280:1256-1258
	AJ	Cleland, "Computer Programmes For Processing Enzyme Kinetic Data," <u>Nature</u> , 1963, 198:463-365
	AK	Cole et al., "The EBV-Hybridoma Technique and its Application to Human Lung Cancer," <u>Monoclonal Antibodies and Cancer Therapy</u> , 1985, Alan R. Liss, Inc., pp. 77-96
	AL	Cote et al., "Generation of human monoclonal antibodies reactive with cellular antigens," <u>Proc. Natl. Acad. Sci. USA</u> , 1983, 80:2026-2030
	AM	Excoffier and Slatkin, "Maximum-Likelihood Estimation of Molecular Haplotype Frequencies in a Diploid Population," <u>Mol. Biol. Evol.</u> , 1995, 12(5):921-927
	AN	Gordon et al., "Consed: A Graphical Tool for Sequence Finishing," <u>Genome Res.</u> , 1998, 8:195-202
	AO	Guatelli et al., "Isothermal, <i>in vitro</i> amplification of nucleic acids by a multienzyme reaction modeled after retroviral replication," <u>Proc. Natl. Acad. Sci. USA</u> , 1990, 87:1874-1878
	AP	Hacia et al., "Detection of heterozygous mutations in <i>BRCA1</i> using high density oligonucleotide arrays and two-colour fluorescence analysis," <u>Nat. Genet.</u> , 1996, 14:441-447
	AQ	Halushka et al., "Patterns of single-nucleotide polymorphisms in candidate genes for blood-pressure homeostasis," <u>Nat. Genet.</u> , 1999, 22:239-247
	AR	Hartl and Clark, "Chromosomes and Heredity," <u>Principles of Population Genetics</u> , 3rd Edition, 1997, Sinauer Associates, Inc., Sunderland, MA, Chapter 3, pp. 96-106

Examiner Signature

Date Considered

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 07039-454001	Application No. 10/824,828
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Bianca A. Thomae et al.	
		Filing Date April 15, 2004	Group Art Unit 1653

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AS	Hedrick, "An Introduction to Gametic Disequilibrium," <u>Genetics of Populations</u> , 2nd Edition, 2000, Jones and Bartlett, Sudbury, MA, pp. 396-405
	AT	Huse et al., "Generation of a Large Combinatorial Library of the Immunoglobulin Repertoire in Phage Lambda," <u>Science</u> , 1989, 246:1275-1281
	AU	Hyrup and Nielsen, "Peptide Nucleic Acids (PNA): Synthesis, Properties and Potential Applications," <u>Bioorgan. Med. Chem.</u> , 1996, 4(1):5-23
	AV	Köhler and Milstein, "Continuous cultures of fused cells secreting antibody of predefined specificity," <u>Nature</u> , 1975, 256(5512):495-497
	AW	Kozbor and Roder, "The production of monoclonal antibodies from human lymphocytes," <u>Immunology Today</u> , 1983, 4:72-79
	AX	Lewis, "PCR's Competitors Are Alive and Well and Moving Rapidly Towards Commercialization," <u>Genetic Engineering News</u> , 1992, 12(9):1
	AY	Lin et al., "A Novel S-Adenosyl-L-methionine:Arsonic(III) Methyltransferase from Rat Liver Cytosol," <u>J. Biol. Chem.</u> , 2002, 277(13):10795-10803
	AZ	Long et al., "An E-M Algorithm and Testing Strategy for Multiple-Locus Haplotypes," <u>Am. J. Hum. Genet.</u> , 1995, 56:799-810
	AAA	Myakishev et al., "High-Throughput SNP Genotyping by Allele-Specific PCR with Universal Energy-Transfer-Labeled Primers," <u>Genome Res.</u> , 2001, 11:163-169
	ABB	Nickerson et al. "PolyPhred: automating the detection and genotyping of single nucleotide substitutions using fluorescence-based resequencing," <u>Nucl. Acids Res.</u> , 1997, 25(14):2745-2751
	ACC	Prince et al., "Robust and Accurate Single Nucleotide Polymorphism Genotyping by Dynamic Allele-Specific Hybridization (DASH): Design Criteria and Assay Validation," <u>Genome Res.</u> , 2001, 11(1):152-162
	ADD	Schafer and Hawkins, "DNA variation and the future of human genetics," <u>Nat. Biotechnol.</u> , 1998, 16:33-39
	AEE	Shastri, "Gene disruption in mice: Models of development and disease," <u>Mol. Cell. Biochem.</u> , 1998, 181:163-179
	AFF	Stoneking et al., "Population Variation of Human mtDNA Control Region Sequences Detected by Enzymatic Amplification and Sequence-specific Oligonucleotide Probes," <u>Am. J. Hum. Genet.</u> , 1991, 48:370-382
	AGG	Summerton and Weller, "Morpholino Antisense Oligomers: Design, Preparation, and Properties," <u>Antisense Nucleic Acid Drug Dev.</u> , 1997, 7(3):187-195
	AHH	Terwilliger and Ott, "Linkage Disequilibrium between Alleles at Marker Loci," <u>Handbook of Human Genetic Linkage</u> , 1994, The Johns Hopkins University Press, Baltimore, pp. 188-193
	AII	Underhill et al., "Detection of Numerous Y Chromosome Biallelic Polymorphisms by Denaturing High-Performance Liquid Chromatography," <u>Genome Res.</u> , 1997, 7:996-1005
	AJJ	Wakayama et al., "Full-term development of mice from enucleated oocytes injected with cumulus cell nuclei," <u>Nature</u> , 1998, 394(6691):369-374
	AKK	Weiss, "Hot Prospect for New Gene Amplifier," <u>Science</u> , 1991, 254:1292-1293
	ALL	Wilkinson, "Statistical Estimations in Enzyme Kinetics," <u>Biochem. J.</u> , 1961, 80:324-332
	AMM	Wilmut et al., "Viable offspring derived from fetal and adult mammalian cells," <u>Nature</u> , 1997, 385(6619):810-813

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 07039-454001	Application No. 10/824,828
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Bianca A. Thomae et al.	
		Filing Date April 15, 2004	Group Art Unit 1653

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	ANN	Wong et al., "Human GM-CSF: Molecular Cloning of the Complementary DNA and Purification of the Natural and Recombinant Proteins," <i>Science</i> , 1985, 228:810-815
	AOO	Zakharyan et al., "Enzymatic Methylation of Arsenic Compounds: Assay, Partial Purification, and Properties of Arsenite Methyltransferase and Monomethylarsonic Acid Methyltransferase of Rabbit Liver," <i>Chem. Res. Toxicol.</i> , 1995, 8:1029-1038

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	